

AMENDMENTS TO THE CLAIMS

1. (withdrawn) The method of forming a composite belt structure for a tire, the method comprising the steps of:

applying a multicord reinforced strip having a strip width S_w onto a rotating crowned building drum, the strips being wound in a zigzag configuration to form at least two zigzag layers wherein the crowned drum has the non-overlapping portions of the strips placed in a central portion and extending in alternation to a pair of shoulder portions having the portions of the strips overlapping, the central portion having a maximum diameter D_o and the shoulder portions have a minimum diameter D_i , the adjacent strips being placed apart from 0 to 2 mm in the central portion and the strips are increasingly overlapping in each shoulder portion as the strips extend from the central portion toward lateral ends of the belt structure to form belt layers of a composite belt structure having the cords per inch in the shoulder portion as measured axially inwardly from the axially inner edge of the strip adjacent the lateral ends of the narrowest radially outer belt layer radially inwardly greater than the cords per inch in the central portion as measured centered on the centerplane of the belt structure.

2. (withdrawn) The method of forming a composite belt structure of claim 1 wherein the strips in the non-overlapping center region occupy at least 50% of the belt width W , W being measured at the lateral extremes or edges of the widest belt layer, and each overlapping shoulder portion occupies 25% or less of the belt width.

3. (withdrawn) The method of forming a composite belt structure of claim 2 wherein the overlapping of strips in each shoulder portion ranges from greater than 0% adjacent the central portion up to 100% at the outermost lateral edge of the belt.

4. (withdrawn) The method of forming a composite belt structure of claim 1 having both zigzag and spirally wound layers and wherein only the strips of the zigzag layers overlap as the strip is wound away from the center region toward the lateral edge.

5. (withdrawn) The method of forming a composite belt structure of claim 4 wherein the overlap of each adjacent zigzag strip adjacent to a turning point at the lateral edge overlaps at a distance of 50% or more of the strip width S_w .

6. (withdrawn) The method of forming a composite belt structure of claim 1 wherein the step of applying the strip to the crowned building drum includes passing the strip from a linear moving strip the linear movement being parallel to and spaced a fixed distance of the axis of rotation of the crowned building drum.

7. (previously presented) A pneumatic tire having a carcass and a belt reinforcing structure, the belt reinforcing structure comprising:

a zigzag belt structure comprised of a rubberized strip of two or more cords, the strips being inclined at 5 to 30 degrees relative to the centerplane of the tire extending in alternation to turnaround points at each lateral edge, wherein in the crown portion of the tire the zigzag belt structure has two layers of cords, and substantially throughout the shoulder portion of the tire the strips are overlapped wherein each shoulder portion is about 25% of the belt width of the widest belt;

and at least one spirally wound belt layer having cords wound spirally at an inclination of 5 degrees or less relative to the tire's centerplane.

8. (previously presented) The pneumatic tire of claim 7, the belt reinforcing structure further comprising: a second zigzag belt structure, wherein the spiral wound belt layer is positioned between the first and second zigzag belt structures, and the spiral wound belt layer has a width greater than the width of the radially innermost zigzag belt structure.

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19. (previously presented) The pneumatic tire of claim 7 wherein the strips are spaced apart a distance of 0 to 2 mm in a central portion of the belt, which is about 50% of the belt width.

20. (previously presented) The pneumatic tire of claim 7 wherein the width of the spiral layer is greater than the width of the zigzag belt structure.

21. (previously presented) The pneumatic tire of claim 8 further comprising two additional spirally wound layers, wherein all of the spirally wound layers are located between the zigzag belt structures and have a width greater than the width of the radially innermost zigzag belt structure.

22. (previously presented) A pneumatic tire having a carcass and a belt reinforcing structure, the belt reinforcing structure comprising:

a zigzag belt structure comprised of a rubberized strip of two or more cords, the strips being inclined at 5 to 30 degrees relative to the centerplane of the tire extending in alternation to turnaround points at each lateral edge, wherein in the crown portion of the tire the zigzag belt structure has two layers of cords, and in the shoulder portion of the tire the strips are overlapped forming three or more layers of cords; wherein each shoulder portion is about 25% or less of the belt width of the widest belt; and at least one spirally wound belt layer having cords wound spirally at an inclination of 5 degrees or less relative to the tire's centerplane, wherein the spirally wound belt layer is wider than the zigzag belt structure.

23. (previously presented) The pneumatic tire of claim 22 further comprising a second zigzag belt structure, wherein the spiral wound belt layer is located between said zigzag belt structures.

24. (previously presented) The pneumatic tire of claim 22 wherein the strips are spaced apart a distance of 0 to 2 mm in a central portion of about 50% of the belt width.

25. (currently amended) A pneumatic tire having a carcass and a belt reinforcing structure, the belt reinforcing structure comprising:

a zigzag belt structure comprised of a rubberized strip of two or more cords, the strips being inclined at 5 to 30 degrees relative to the centerplane of the tire extending in alternation to turnaround points at each lateral edge, wherein ~~in the~~ substantially throughout the shoulder portion of the tire the strips are overlapped, wherein the strip overlap distance increases from the center portion to the belt edge; wherein each shoulder portion is about 25% of the belt width of the widest belt; and at least one spirally wound belt layer having cords wound spirally at an inclination of 5 degrees or less relative to the tire's centerplane.

This listing of claims will replace all prior versions and listings of claims in the application.